



DOUBLE D ELECTRONICS LTD

DDA257-XXX General Purpose 1+2 Switch Controller & Redundancy Controller

- * Up to four coaxial or waveguide switches in 1+2 configuration
- * Automatic redundancy mode protects two chains
- * LNB Power supply option
- * Generic front panel
- * Remote Monitoring & Control Port
- * Muting control when used with HPAs
- * Redundant Power Supplies
- * RS-232 and RS-422/485 serial ports for RC&M
- * 1U 19" rack mount
- * Summary alarm output



The DDA257 is a general purpose controller for 1+2 switching systems using coaxial or waveguide switches, and includes automatic redundancy facilities. Its compact size makes it ideal for mobile use, and other applications where space is at a premium. The configuration is ideal for small dual-polarisation up- and down-links, with a single standby available to two paths.

A wide range of switch types are supported, including IF coaxial (50Ω or 75Ω), SHF coaxial and waveguide. Input and output switches may be different types, giving support for a wide range of equipment including HPAs, up and down converters, LNAs, LNBs and modems.

The unit supports two fault signals from each chain (typically alarm and fault) and there is a volt-free contact output for HPA muting during switching. Buffered alarm outputs are also provided for the main alarm.

HPA muting is generated within the controller; the affected HPAs are muted during switching, and if a switch is moved manually or becomes disconnected.

The DDA257 includes a remote monitoring & control port supporting 4-wire RS-485 and RS-232, with a protocol based on the larger DDA70 and DDA86 families, as well as having a high degree of compatibility with the DDA219/DDA69/DDA78 1+1 controllers.

The front panel provides local control and status, and the standard layout is shown above. Other arrangements, colour schemes etc may be available on request.

SPECIFICATION

- Physical: 19" rack, 1U high, 450mm deep (excluding connectors).
- Power: 90-254V a.c., 48-62Hz, 150VA max. Redundant power feed (dual power supplies) via two IEC mains inlets
- Switching: Support for up to four mechanical switches:
Option 1 - External coaxial or waveguide, 24V coils, common negative, including inputs for locks.
Option 2 - External coaxial switch, 24V coils, common positive.
Option 3 - Internal latching coaxial transfer switch, 50Ω, to 18GHz.
Option 5 - Internal latching coaxial transfer switch, 50Ω, to 200MHz
Option 7 - Internal latching coaxial transfer switch, 75Ω, to 200MHz
- Chain Alarms: three 9-pin D-sockets; each with two inputs for volt-free contact or NPN open collector, and volt-free changeover contact for muting.
- Host Serial: 9-pin D-socket; RS-232 and 4-wire RS-422/RS-485, fixed 9600,7,e,1. Supports "Printable ASCII" and "STX/ETX" protocols.
- Buffered Alarms: 25-D plug gives six changeover relay contacts which tracks the corresponding main alarm.
- Summary Alarm: Also on 'buffered alarm' connector; volt-free relay contact signals alarm on any detected fault.
- Network: A 10/100BaseT network port, with web browser interface and optional SNMP (V1 and V2c) can be provided; further details on request.

Ordering Information

DDA257-MIO 1+2 Redundancy and Switching Controller.

In the above part number, substitute as follows:

M Mimic type:
0 - Standard generic mimic (see drawing on previous page)

I, O Input and output switch types - option number as per the 'Switches' section of the specification (zero if not required)

Example: DDA257-051 has a generic mimic, 50Ω IF input switches and outputs to drive two external coaxial or waveguide switches.